

Be it known that Mary Kay Bitton has invented a new and useful

Sand Stamping Tool and Method of Use

of which the following is a specification:

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Field of the Inventions

This invention relates to outdoor recreational toys for sand or snow play.

Background of the Inventions

10 For kids, every summer brings the same old sand toys -
buckets, shovels, sieves and molds. The only thing that changes
from year to year are the characters applied to the toys. There
are various ways for children to create designs in sand. Molds
are used to create three-dimensional objects. Sand shovels are
15 used to pick up sand and the sand poured into molds. The mold
with sand is then turned upside down and the mold removed to
form the three-dimensional object. As is often the case with
smaller children, using the mold is not very successful. Most
of the sand falls out of the mold before it is turned, leaving
20 craters in the intended sand design. Other ways of creating
designs in sand include sticks, fingers or other sharp objects
which are used to scribe messages and designs in the sand.

Flat broad indicia have been proposed to make designs in
soft sand, such as shoe prints, foot prints and hand prints.
25 McCook, Recreational Printing Device, U.S. Pat. No. 5,980,351
(Nov. 9, 1999) describes a shoe block with a flat broad indicia

on the sole. The indicia is intended to leave an impression in soft sand when a child walks on the stilts. However, broad indicia or closely spaced indicia inhibit pattern transfer from the stamp to sand or snow. Because of the flat broad indicia, a great deal of force must be exerted on the stamp for any impression to appear in the desired surface, and even so, little pattern transfer actually occurs.

In an unrelated art, cookie cutters have been used to create two-dimensional objects in a desired shape. Cookie dough, playdoh®, clay or other dough like material may be rolled into a sheet-like material. Thereafter, the sheet is cut with a conventional cookie cutter or the like to obtain a flat, two-dimensional shaped cutout corresponding to the shape of the cutter.

Summary

The devices and methods described below provide a means for children to create clear imprint designs in sand or snow. A sand stamping tool or sand die is created and used to make designs when pressed into and removed from the desired surface. Detail blades are arranged in an open area design that cuts into the desired surface with a modicum of force that is easy for a small child to exert. The tool can be used to provide amusement to children playing in the sand or in the snow. The tool can also be used for teaching purposes.

Brief Description of The Drawings

Figure 1 is a top view of a sand die having a cat-like shape.

Figure 2 shows a bottom view of the sand die of Figure 1.

Figure 3 is a top view of the resulting imprint having a cat-like shape formed with the sand die of Figure 1.

Figure 4 is a top view of a sand die having a shape of the letter "J".

5 Figure 5 is a top view of a plurality of imprints made by a plurality of sand dies and forming the words "SAND STAMPS".

Detailed Description of the Inventions

Figure 1 shows a sand stamping tool hereinafter referred to as a sand die 1 having a cat-like shape. The sand die shown in
10 Figure 1 is approximately four inches wide by four inches long. The sand die 1 is shown with a handle 2 attached to the top surface 3 of a plate 4 for grasping, however the handle is optional and could be in any other form, such as a knob.

15 The sand die is preferably be made of plastic, hard acrylic, or hard rubber but could also be made of thin sheet metal, such as aluminum or stainless steel. The die can be any color, opaque or transparent. The top surface 3 of plate 4 can be bumpy, decorative, textured or smooth.

20 Figure 2 shows the bottom of the sand die of Figure 1. The side wall 5 is attached to the underside of plate 4 at approximately a perpendicular angle. The side wall 5 and interior surface 6 of plate 4 form an interior cavity 7. It is desirable that the interior surface 6 of the sand die be made of a relatively smooth, non-porous, non-sticking material to ensure
25 that the resulting imprint is not marred by the removal of the sand die from the desired surface. Most plastics will perform well. The sand die has a roughly uniform vertical thickness. The sand die could also have slight concave or convex top surface.

The side wall 5 encircles the detail blades 8, here detailing the eyes, nose, mouth and whiskers of the cat, said detail blades attached to the plate at approximately a perpendicular angle. The detail blades 8 may take on virtually any pattern of regular or irregular shapes, straight or curved or a combination thereof. The precise configuration of the detail blades within the sand die is independent of the external shape of the sand die, and may comprise a plurality of regular and/or irregular, straight, and/or curved blades within a given sand die.

The side wall 5 and detail blades 8 have critical dimensions to ensure that a clear imprint may be made in the desired surface with a modicum of force within the capabilities of a child. The thickness of the detail blades and side walls is preferably in the range of .015 to .25 inches, more preferably about .125 inches. A minimum distance between detail blades helps provide a clear imprint. The more open and airy the overall design, i.e. the more space between adjacent detail blades, the better the imprint left in the sand. The minimum space between detail blades needed to ensure a clear imprint is about .045 inch, or at least as much of a distance to fit a few grains of sand. The minimum inner diameter of a circular blade (or curved portion of a blade) needed to ensure a clear imprint is about .045 inch. The depth of the detail blades is preferably in the range of .03125 inch to 1 inch or more, more preferably about .25 inches. The minimum range would result in a slight imprint whereas the longer depth would leave a deeper imprint, but the depth should be such that a child can pull the sand die from the sand with ease. The depth of the side wall may be greater than the depth of the detail blades, as shown in Figure 2. The length of the detail blades or side walls may be virtually any length practicable.

In use, the sand die 1 is held by the handle, knob or outer edge and pressed bottom side down (or detail side down) into the sand or snow to form the desired imprint in the desired surface. Figure 3 shows the resulting imprint made in the sand with the device of Figure 1 and Figure 2.

Sand dies may have virtually any shape desired, such as geometric shapes, shapes depicting humans, animals, or fictional characters as well as alphanumeric characters, geographical shapes, shapes of various objects, etc. Sand dies may have virtually any size accommodating the critical dimensions described herein.

In its simplest form, the sand die could form just an outline with no interior detail, such as a geometric shape or alphanumeric character. The sand die could have an open design with only a side wall and no plate. As shown in Figure 4, the sand die 1 is shown in the shape of the letter "J", without a handle and without a top plate. The said die could also be comprised of detail blades attached to a plate and with no surrounding side wall.

One advantage to this toy is that even small toddlers can use them. The blade-like outer edge and detail blades cut into the medium to leave a clear imprint. The resulting image is clear and crisp. It does not take a great deal of force to create the design in the desired surface.

It should be appreciated that a plurality of sand dies could be used to cut a plurality of imprinted designs in the sand, such as letters to form the words "SAND STAMPS" as shown in Figure 5. Furthermore, the desired surface can be decorated with paint or colored water before or after making the design imprint.

Various sand dies could be packaged and sold in "themes", such as Snow White and the Seven Dwarves. Doll-like shapes could be packaged with sand dies representing clothes and accessories. Face shapes could be packaged with sand dies representing assorted eyes, noses, and mouths. The possibilities are practically endless.

Sand dies can be used as a teaching aid. Various dies could be packaged in educational packages, with sand dies representing the letters of the alphabet, numbers, or geometric shapes, and sold with sterilized sand. The packages could be displayed in stores that specialize in teaching supplies, and used by preschool teachers in the classroom or on the playground.

The sand dies, packaging or associated display should be marked indicating that the sand dies are suitable for stamping sand or snow. The packages should be displayed or placed so that prospective purchasers would find them with other sand or snow toys or in the seasonal aisle with, for example, sand buckets, molds and shovels. Additionally, retailers may place associated displays, indicating the intended use of the sand dies, in close proximity to the product.

Thus, while the preferred embodiments of the devices and methods have been described in reference to the environment in which they were developed, they are merely illustrative of the principles of the inventions. Other embodiments and configurations may be devised without departing from the spirit of the inventions and the scope of the appended claims.